

FT12-105D (12V105Ah)

RITAR®

Specification

Cells Per Unit	6
Voltage Per Unit	12
Capacity	105Ah@20hr-rate to 1.75V per cell @25°C
Weight	Approx. 32.5 Kg (Tolerance ±2%)
Internal Resistance	Approx. 5.0 mΩ
Terminal	F14(M8)/F8
Max. Discharge Current	1050A (5 sec)
Design Life	15 years (floating charge)
Maximum Charging Current	31.5 A
Reference Capacity	C3 73.2AH C5 84.5AH C10 99.3AH C20 105.0AH
Float Charging Voltage	13.6 V~13.8 V @ 25°C Temperature Compensation: -3mV/°C/Cell
Cycle Use Voltage	14.2 V~14.4 V @ 25°C Temperature Compensation: -4mV/°C/Cell
Operating Temperature Range	Discharge: -20°C~60°C Charge: 0°C~50°C Storage: -20°C~60°C
Normal Operating Temperature Range	25°C ±5°C
Self Discharge	RITAR Valve Regulated Lead Acid (VRLA) batteries can be stored for up to 6 months at 25°C and then recharging is recommended. Monthly Self-discharge ratio is less than 3% at 25°C. Please charged batteries before using.
Container Material	A.B.S. UL94-HB, UL94-V0 Optional.



FTD (Front Terminal Deep Cycle) series batteries provide superior high integrity and reliability. It is specially designed for frequent cyclic charge and discharge. By using strong grids, thick plate and special active material are designed for repeated deep-discharge applications. The FTD series battery offers 30% more cyclic life than the standby series. And the dimensions are designed for 19" and 23" cabinet installation. It is suitable for telecom, solar and wind renewable energy storage, mobility and medical equipment, RV, telecom, broadband and cable TV, UPS systems etc.



Dimensions

Length	508±2mm (20.0 inches)
Width	110±2mm (4.33 inches)
Height	236±2mm (9.29 inches)
Total Height	236±2mm (9.29 inches)
Terminal	Value
M5	6~7 N*m
M6	8~10 N*m
M8	10~12 N*m

Unit: mm

Constant Current Discharge Characteristics : A(25°C)

F.V/Time	15MIN	30MIN	1HR	2HR	3HR	4HR	5HR	8HR	10HR	20HR
1.60V	174.7	102.1	59.9	35.9	25.8	21.0	17.7	12.1	10.6	5.43
1.65V	170.1	99.9	58.8	35.4	25.5	20.7	17.5	12.0	10.5	5.39
1.70V	164.1	96.9	57.3	34.7	25.0	20.4	17.2	11.8	10.3	5.33
1.75V	156.2	93.0	55.4	33.7	24.4	19.9	16.9	11.6	10.2	5.25
1.80V	146.2	88.0	52.9	32.5	23.6	19.3	16.4	11.3	9.93	5.15
1.85V	133.4	81.6	49.6	31.0	22.6	18.5	15.8	10.9	9.61	5.01

Constant Power Discharge Characteristics : WPC(25°C)

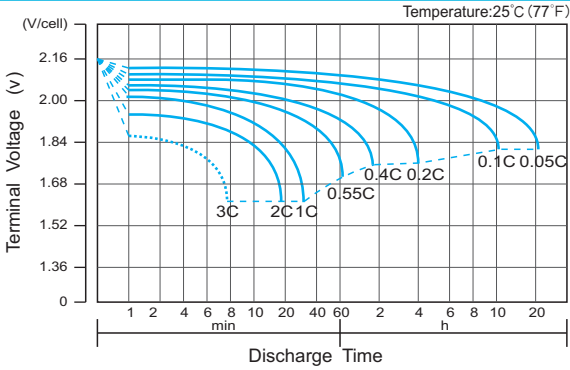
F.V/Time	15MIN	30MIN	1HR	2HR	3HR	4HR	5HR	8HR	10HR	20HR
1.60V	310	188	114	69.1	50.1	40.9	34.6	23.9	21.1	10.8
1.65V	308	187	113	68.5	49.7	40.6	34.4	23.8	20.9	10.8
1.70V	300	182	110	67.4	48.9	40.0	34.0	23.5	20.7	10.7
1.75V	290	177	107	65.9	48.0	39.2	33.4	23.1	20.4	10.5
1.80V	275	169	103	63.9	46.6	38.2	32.5	22.6	19.9	10.3
1.85V	254	158	97	61.1	44.7	36.7	31.4	21.9	19.3	10.1

(Note) The above characteristics data are average values obtained within three charge/discharge cycle not the minimum values.

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Discharge Characteristics Curve



Charge Characteristic Curve for Cycle Use(IU)



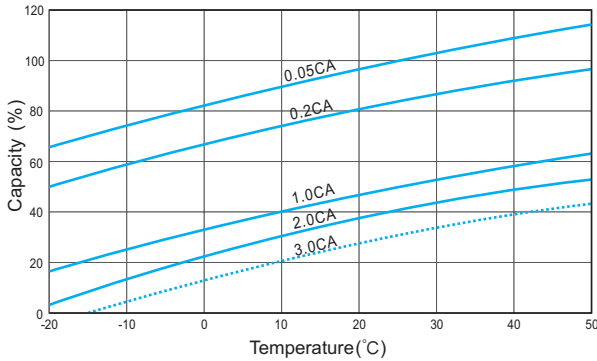
Cycle Life in Relation to Depth of Discharge



Relationship Between Charging Voltage and Temperature



Temperature Effects on Capacity



Storage Characteristics



Effect of Temperature on Long Term Life



Relationship of OCV And State of Charge(20°C)



(Note) All above information shall be changed without prior notice, Ritar reserves the right to explain and update the latest information.